Section 5: Using the CICS Component

This section describes how to use the CICS Component to analyze constraints to improved performance of a CICS region.

As discussed in Section 1, the main purpose of the CICS Component of CPExpert is to evaluate the performance of an individual CICS region, identify potential constraints to improved performance, and suggest ways to eliminate the constraints.

This process is described in terms of providing guidance to the CICS Component, actions that should be taken on a daily basis, and actions that should be taken on a monthly or periodic basis.

Chapter 1: Prepare guidance for the CICS Component

Use TSO ISPF to change the CPEXPERT.USOURCE(CICGUIDE) PDS member to reflect the guidance required by the CICS Component. Exhibit 3-1 illustrates the variables that must be changed in the CICGUIDE PDS member.

This step must be taken only when the guidance changes. Do not hesitate to change the guidance if you feel that the rules are applying inappropriate analysis or if there are areas in which you do not wish to make a change.

Chapter 2: Actions on a daily basis

Use the CICS Component to a daily analysis of constraints to improved performance in the CICS region, by following the below steps:

Step 1: Execute the CICCPE Module

The JCL to execute the CICCPE module is described in Section 4. We normally suggest that you append the JCL to execute the CICCPE module to the normal daily update of your performance data base.

Step 2: Review the output from the CICCPE Module

If any rules were produced, refer to the specific rule in Appendix A for a description of the rule, a discussion of why the rule was produced, and suggestions for actions that should be taken.

Depending upon the output, you may wish to make changes or wait to see if the problems are identified in an analysis of a subsequent day's data, or you may wish to wait until enough information has been placed the historical files maintained by the CICS Component that a historical analysis can be performed.

The following points should be considered in deciding whether to make a change:

- The CICS Component may identify problems which clearly should be solved because their effect is so serious. In many cases, once the problem is identified, users immediately realize that the problem and suggested solutions make sense.

- The CICS Component may identify problems which you do not feel will commonly occur. For example, you may realize that the results are based upon abnormal workload and changes may be unnecessary since the conditions will not occur often.

NOTE: You generally should make only one change at a time if you decide to make changes! This sound tuning advice if founded on the principles that:

- Tuning is an art. No one (and certainly not CPExpert) can guarantee that any particular change will have a beneficial effect in all environments.

- Changes may have unexpected effects. Most systems are complex, parameters may improve performance of one area at the expense of performance in another area, and management may wish resources focused on the second area.

- If you make multiple changes and performance deteriorates, you will be unable to identify easily the change causing the problem. You are then faced with the problem of backing out all of the changes and starting over, one at a time.

- Some changes are not "precise" in that, for example, keyword values might need to be adjusted a little at a time until a suitable value is reached. If multiple changes are made, you will be unable to detect the effect of the fine- tuning of the changes.

Above all, **remember that the recommendations from CPExpert are simply options** to be considered in the context of overall objectives. You must decide whether the recommendations are reasonable. Rarely should a recommendation be implemented without first evaluating how the recommendation will effect other workloads.

Please remember that CPExpert is not intended to replace a performance analyst. Rather, CPExpert was developed to help analyze the performance of MVS systems. CPExpert automates much of the routine of computer performance evaluation. Performance analysts can then focus on the areas which are not routine and which "require thinking".

With this philosophy, please let us know when you discover areas in which CPExpert can be modified to help you analyze a problem. We will improve our product and you will have more help!

